

## ABSTRACT OF THE DISCLOSURE

A voltage regulator with quick response includes: an output terminal supplying a regulated voltage; and at least a first boost circuit, controlled for alternately accumulating a first charge in a first operating condition and supplying the first charge to the output terminal in a second operating condition. In addition, the first boost circuit is provided with a compensation stage supplying the output terminal with a second charge substantially equal to the first charge, when the first boost circuit is in the first operating condition.